03/06/2025 MCA SEM-III (R-2020-21) DSCC   QP CODE: 10081778

(3 Hours)   **Total Marks: 80**

Note: 1) Question No.1 is compulsory.
    2) Attempt any THREE from the remaining questions.
    3) Figures to the right indicate full marks.

1. Write Short Notes on *__any four__* :-   (20)

  a) Mutual Exclusion
  b) IPC Message Structure
  c) Transparency in Distributed System
  d) QoS (Quality of Service) in Cloud
  e) Aneka

2. (a) What are the different address space transfer mechanisms used in the
    Process transfer.   10

  (b) Define Saas, Paas and Iaas along with their relative benefits.   10

3. (a) Explain what is meant by absolute, consistent and casual ordering of messages 10

  (b) Explain the various hardware architectures used to implement DSM System.   10

4. (a) What is RPC? Explain in detail RPC execution.   10

  (b) What is Cloud computing? Explain different Cloud models in details.   10

5. (a) Describe load sharing approach in Distributed Systems.?   10

  (b) Discuss the clock synchronization algorithms used for distributed systems.   10

6. (a) Explain the various thread models.   10

  (b) Discuss various Election algorithms in detail.   10

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